

CLAIMS

What is claimed is:

1. A temperature-sensing wafer position detection system, comprising:

a bake plate having a temperature-sensing apparatus for monitoring a change in temperature of said bake plate upon placement of a wafer on said bake plate; and

a microprocessor operably connected to said temperature-sensing apparatus for receiving a temperature data signal from said temperature-sensing apparatus and aborting operation of said bake plate when said change in temperature of said bake plate falls below a threshold value in a specified time interval.

2. The system of claim 1 wherein said temperature-sensing apparatus comprises a plurality of pyrometers engaging said bake plate.

3. The system of claim 1 further comprising an annular base carried by said bake plate and a wafer guide extending upwardly from said base for guiding a wafer onto said base.

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4. The system of claim 3 wherein said temperature-sensing apparatus comprises a plurality of pyrometers engaging said bake plate.

5. The system of claim 1 wherein said bake plate comprises a plate body having a heating surface and a base carried by said heating surface for supporting the wafer in spaced-apart relationship to said heating surface.

6. The system of claim 5 further comprising a wafer guide carried by said base for guiding the wafer onto said base.

7. The system of claim 5 wherein said temperature-sensing apparatus comprises a plurality of pyrometers extending through said plate body to said heating surface and wherein said microprocessor is operably connected to said plurality of pyrometers.

8. The system of claim 7 further comprising a wafer guide carried by said base for guiding the wafer onto said base.

9. A temperature-sensing wafer position detection system, comprising:

a bake plate having a temperature-sensing apparatus operably engaging said bake plate for monitoring a change in temperature of said bake plate upon placement of a wafer on said bake plate;

a controller operably connected to said bake plate for operating said bake plate; and

a microprocessor operably connected to said temperature-sensing apparatus for receiving a temperature data signal from said temperature-sensing apparatus, said microprocessor operably connected to said controller for aborting operation of said bake plate through said controller when said change in temperature of said bake plate falls below a threshold value in a specified time interval.

10. The system of claim 9 wherein said bake plate comprises a plate body having a heating surface and a base carried by said heating surface for supporting the wafer in spaced-apart relationship to said heating surface.

11. The system of claim 10 wherein said temperature-sensing apparatus comprises a plurality of pyrometers extending through said plate body to said heating surface.

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12. The system of claim 10 further comprising a wafer guide carried by said base for guiding the wafer onto said base.

13. A method of sensing a position of a wafer on a bake plate, comprising:

setting said bake plate at a temperature set point for a baking process;

placing said wafer on said bake plate;

measuring a change in temperature of said bake plate over a specified time interval;

determining whether said wafer is properly positioned on said bake plate based on said change in temperature over said specified time interval; and

aborting said baking process in the event that said wafer is improperly positioned on said bake plate.

14. The method of claim 13 wherein said determining whether said wafer is properly positioned on said bake plate comprises determining that said wafer is properly positioned on said bake plate when said change in temperature is at least as great as a threshold value for said change in temperature over said specified time interval.

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15. The method of claim 14 wherein said threshold value is one percent of said set point temperature.

16. The method of claim 15 wherein said specified time interval is 10 seconds.

17. The method of claim 13 wherein said determining whether said wafer is properly positioned on said bake plate comprises determining that said wafer is improperly positioned on said bake plate when said change in temperature is less than a threshold value for said change in temperature over said specified time interval.

18. The method of claim 17 wherein said determining whether said wafer is properly positioned on said bake plate comprises determining that said wafer is properly positioned on said bake plate when said change in temperature is at least as great as said threshold value for said change in temperature over said specified time interval.

19. The method of claim 18 wherein said threshold value is one percent of said set point temperature.

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20. The method of claim 19 wherein said specified time interval is 10 seconds.